1. BPA = ______________________________ ____________________ ______________________

2. What can an investigator learn from the analysis of a blood spatter?
   - Type and velocity of ___________________
   - Number of ___________________
   - Handedness of assailant (__________or _________-handed)
   - ____________________ and ____________________ of the victim and assailant during and after the attack
   - Which ____________________ were inflicted first
   - Type of ____________________
   - How long ago the ____________________ was committed
   - Whether ____________________ was immediate or delayed

3. What are several methods for detecting traces of blood at a crime scene?

4. Identify these terms associated with bloodstain pattern analysis.
   - ____________________ – Bloodstains created from the application of force to the area where the blood originated.
   - ____________________ – The place from where the blood spatter came from or originated.
   - ____________________ – The angle at which a blood droplet strikes a surface.
   - ____________________ – The droplet from which a satellite spatter originates.
   - ____________________ – Small drops of blood that break off the parent spatter when the blood hits a surface.
   - ____________________ – The pointed edges of a stain that radiate out from the spatter; can help determine the direction from which the blood traveled.

5. What are the basic types of bloodstain patterns?
   - Passive Bloodstains
     - Patterns created from the force of ____________________
     - Drop, series of drops, _________ patterns, blood ____________, etc.
   - Projected Bloodstains
     - Patterns that occur when a _______________ is applied to the _____________ of the blood
     - Includes low, medium, or high _____________ spatters, cast-off, _____________ spurting, _____________ blood blown out of the nose, mouth, or wound.
   - Transfer or Contact Bloodstains
     - The pattern created when a wet, bloody object comes in _____________ with a target surface; may be used to identify an _____________, or body _____________.
     - _____________ pattern from an object moving through a bloodstain or _____________ pattern from an object leaving a bloodstain.
6. Watch the “Blood Spatter Science” movie from United Streaming to help you complete this section.
   ▶ What kind of blood do the investigators use in their “crime scenes”? ______________________
   ▶ True or False? Blood evidence follows a definite pattern that can be applied to every crime scene.
   ▶ Complete this statement: What you can’t ______________, you can’t ______________.

7. Blood Spatter Labs

Lab 1: Complete the **Single Drops** lab and answer the questions.
   What did you notice about the **diameter** of the parent droplets as you increased the height of the drop?
   How do the **spines** compare from the different heights?

Lab 2: Complete the **Multiple Drops** lab and answer the questions.
   What did you notice about the **diameter** of the parent droplets as you increased the height of the drop?
   What do you notice about the **diameter** of the satellite spatter as you increased the height of the drop?

Lab 3: Complete the **Motion Droplets** lab and answer the questions.
   Draw a sketch of the droplets showing the size, shape, and/or distance between them at each speed in the chart below.

<table>
<thead>
<tr>
<th>Walking Rate</th>
<th>Sketch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slow</td>
<td></td>
</tr>
<tr>
<td>Normal</td>
<td></td>
</tr>
<tr>
<td>Fast</td>
<td></td>
</tr>
</tbody>
</table>

   What did you notice about the **shape** of the droplets as you increased your walking speed?
   What did you notice about the **spines** as you increased your walking speed?
   What did you notice about the **distance between the droplets** as you increased your walking speed?

Lab 4: Complete the **Angle of Impact** lab and answer the question.
   What did you notice about the shape of the droplets as you increased the angle of the paper?